Stack Overflow Developer Survey

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OUTLINE

- Executive Summary
- Introduction
- Methodology
- Results
  - Visualization – Charts
  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
- Appendix

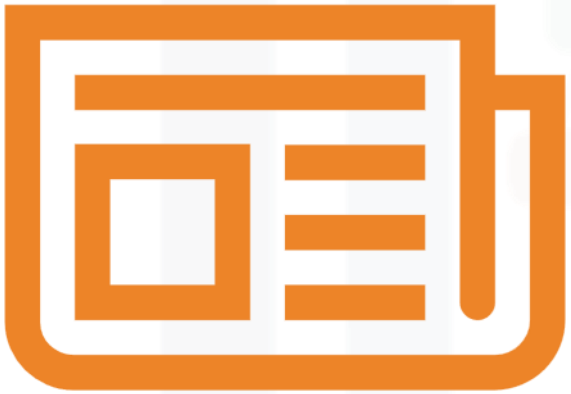
EXECUTIVE SUMMARY

- Data Contextualization & Analysis Goal
- Methodology Description
  - Data Gathering
  - Data Analysis
  - Data Visualizations
- Results Presentation Supported With Graphs & Trends
- Discussion Of Overall Findings & Implications Regarding The Results Previously Exposed
- Final Conclusions Of The Carried Out Research

INTRODUCTION

- Stack Overflow's Annual Developer Survey Is The Largest & Most Comprehensive Survey Of People Who Code Around The World
- Results Don't Represent Everyone In The Developer Community Evenly
- Nearly 30,000 Developers
- Trends To Predict Where The Developers Are Going
- Characterization Of Developers Around The Globe

METHODOLOGY



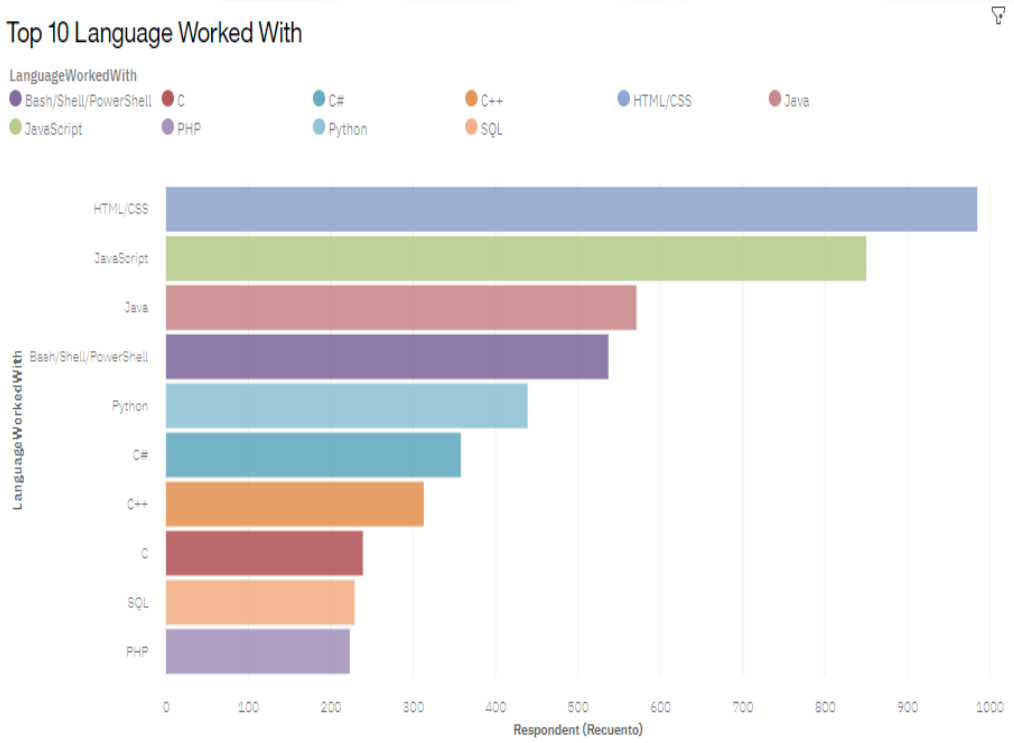
- Collection of Survey Data & Exploration of the Survey
  - Web Scraping
  - APIs
  - Request library
- Data Wrangling
- Exploratory Data Analysis
  - Analyzing Data Distribution
  - Handling Outliers
  - Correlations
- Data Visualization
  - Highlight the Distribution of the Data, its Relationships, its Composition & Comparison
- Dashboards

RESULTS

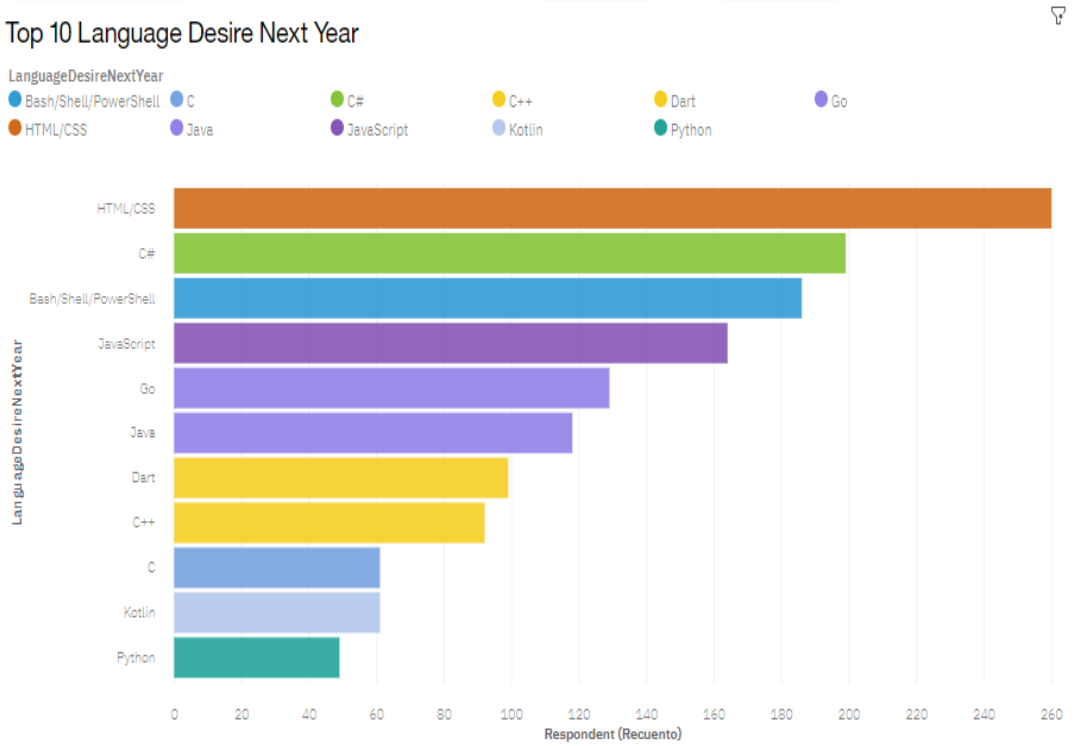
- GitHub Link:
  - https://github.com/facszero/FC_IBMDataAnalystCapstoneProject
- Labs Links:
  - https://github.com/facszero/FC_IBMDataAnalystCapstoneProject/blob/main/FC_01_Lab2_Collecting_Jobs_data_Using_API_HCRJxMs6x.ipynb
  - https://github.com/facszero/FC_IBMDataAnalystCapstoneProject/blob/main/FC_01_Lab3_Web-Scraping-Review-Lab_U0BoDnI7Z.ipynb
  - https://github.com/facszero/FC_IBMDataAnalystCapstoneProject/blob/main/FC_01_Lab4_Web-Scraping-Lab_LWj_BtD3F.ipynb
  - https://github.com/facszero/FC_IBMDataAnalystCapstoneProject/blob/main/FC_01_Lab5_ExploreDataSet-lab_Im5IwbUBd.ipynb
  - https://github.com/facszero/FC_IBMDataAnalystCapstoneProject/blob/main/FC_02_Lab10_DataWrangling-lab_2UAXNFCbW.ipynb
  - https://github.com/facszero/FC_IBMDataAnalystCapstoneProject/blob/main/FC_03_Lab11_12_13_ExploratoryDataAnalysis-lab_SDB9jsdea.ipynb
  - https://github.com/facszero/FC_IBMDataAnalystCapstoneProject/blob/main/FC_04_Lab14_to_21_DataVisualization-lab_CRVrWTXmj.ipynb

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

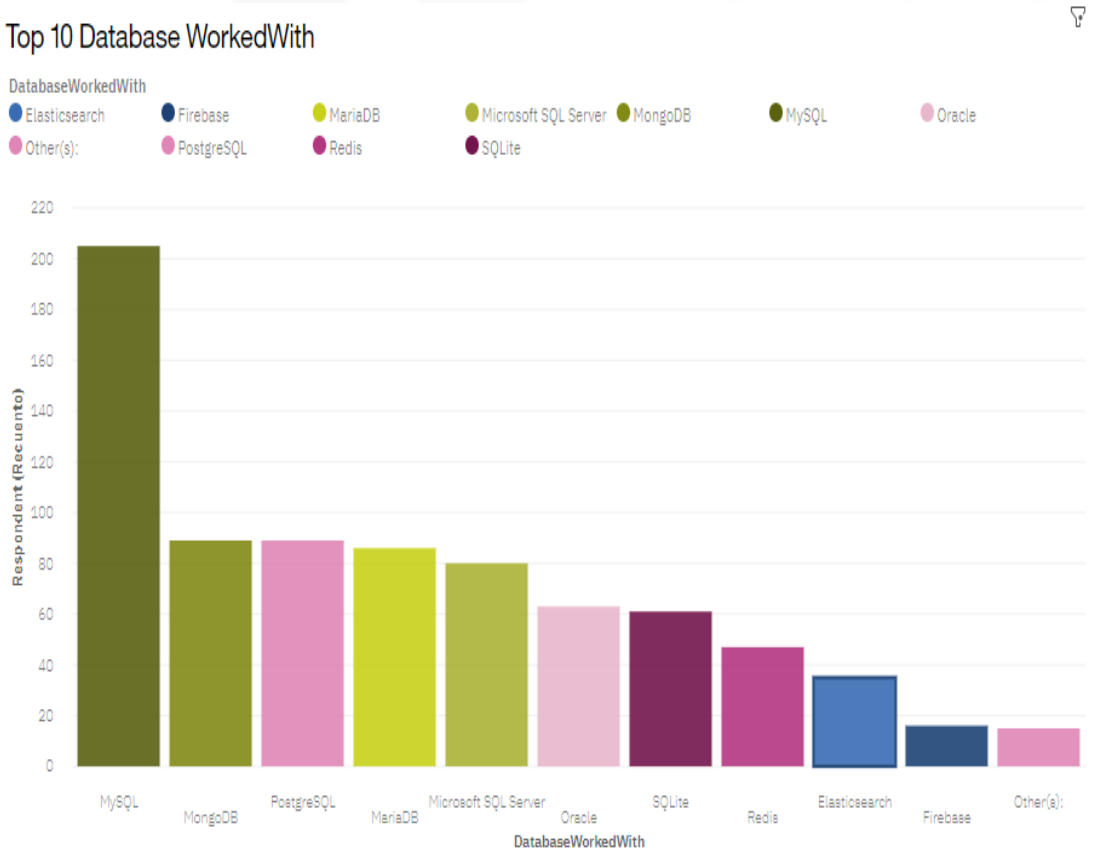
- HTML/CSS Seems To Keep As Leading Language
- C# Fastest Growing
- Great Interest In Dart

Implications

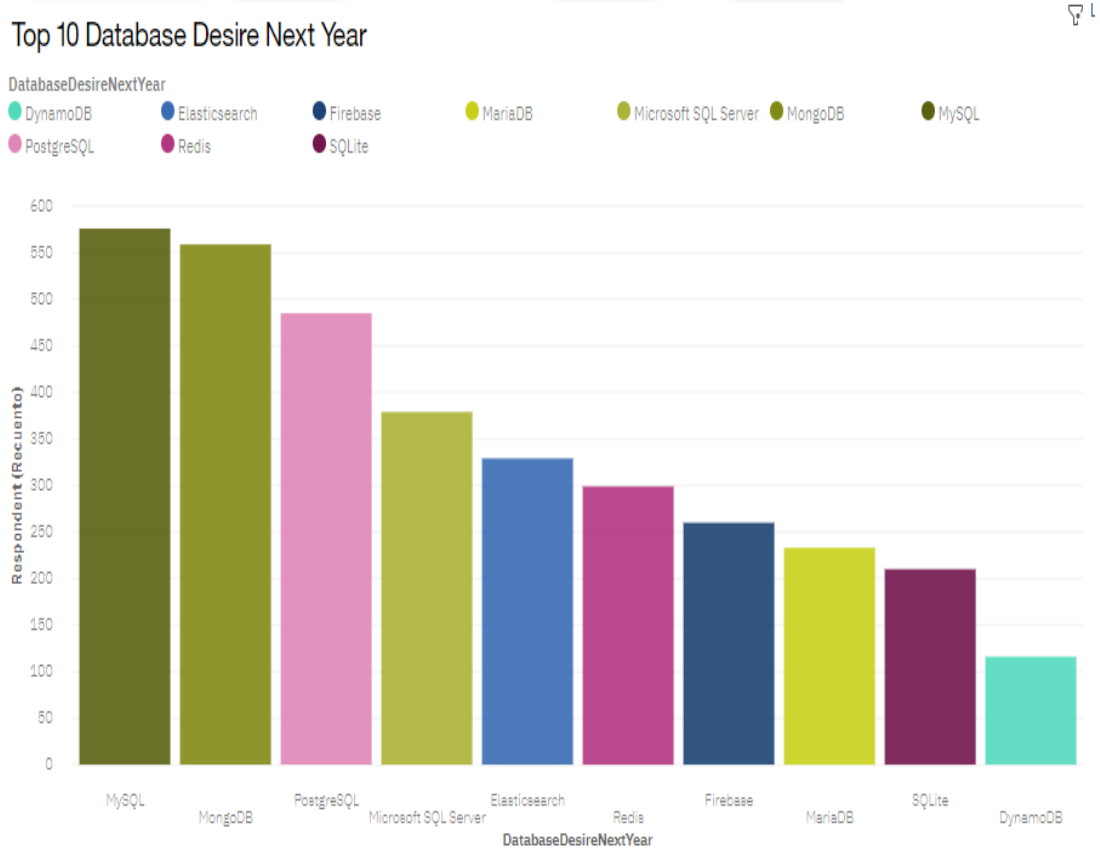
- Possible Developers Migration From PHP To Dart

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL As Most Used Database
- Increasing Interest In PostgreSQL And MongoDB
- Lack Of Interest In Oracle

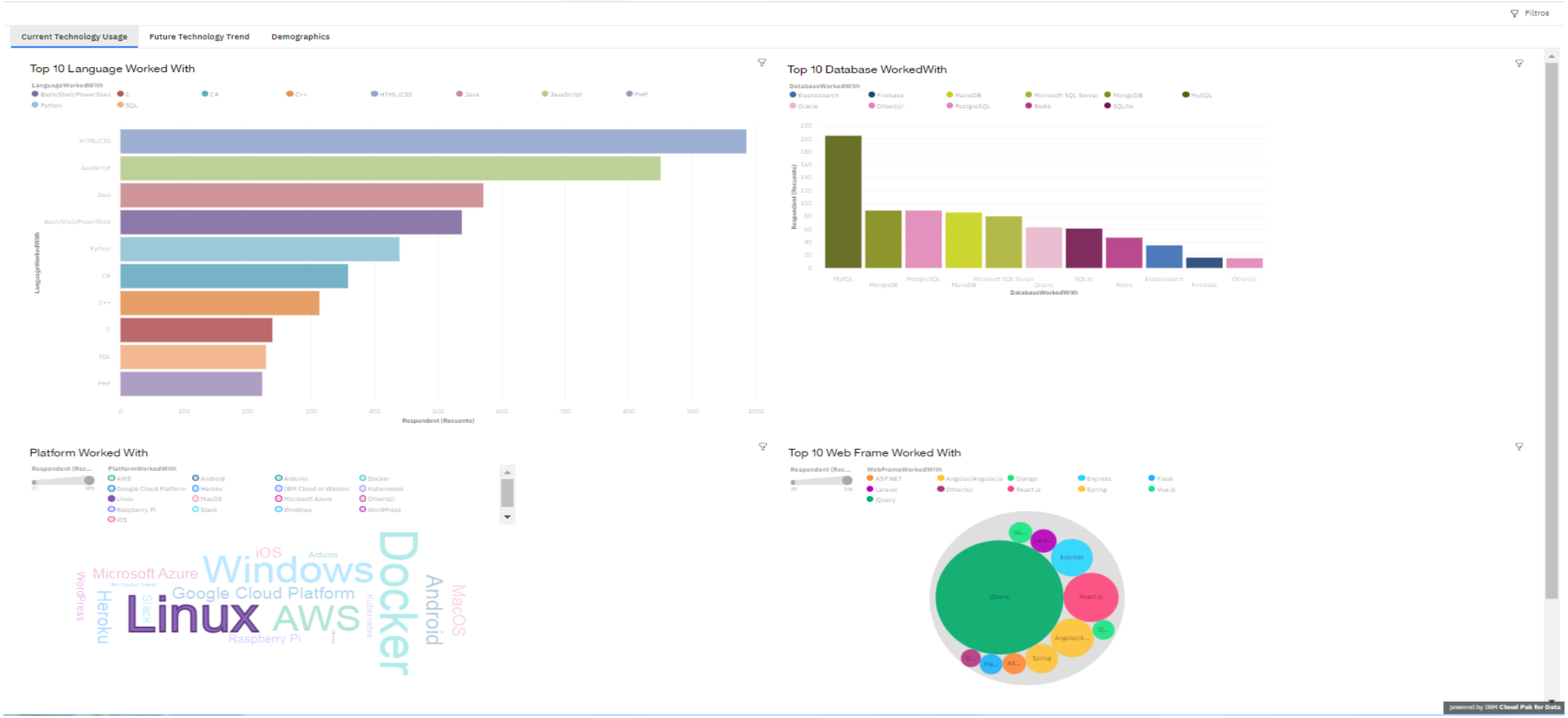
Implications

- Elasticsearch & Microsoft SQL Server Gain Market Positions
- MariaDB & SQLite Losing Ground In The Market
- Oracle Tends to Disappear as Interest

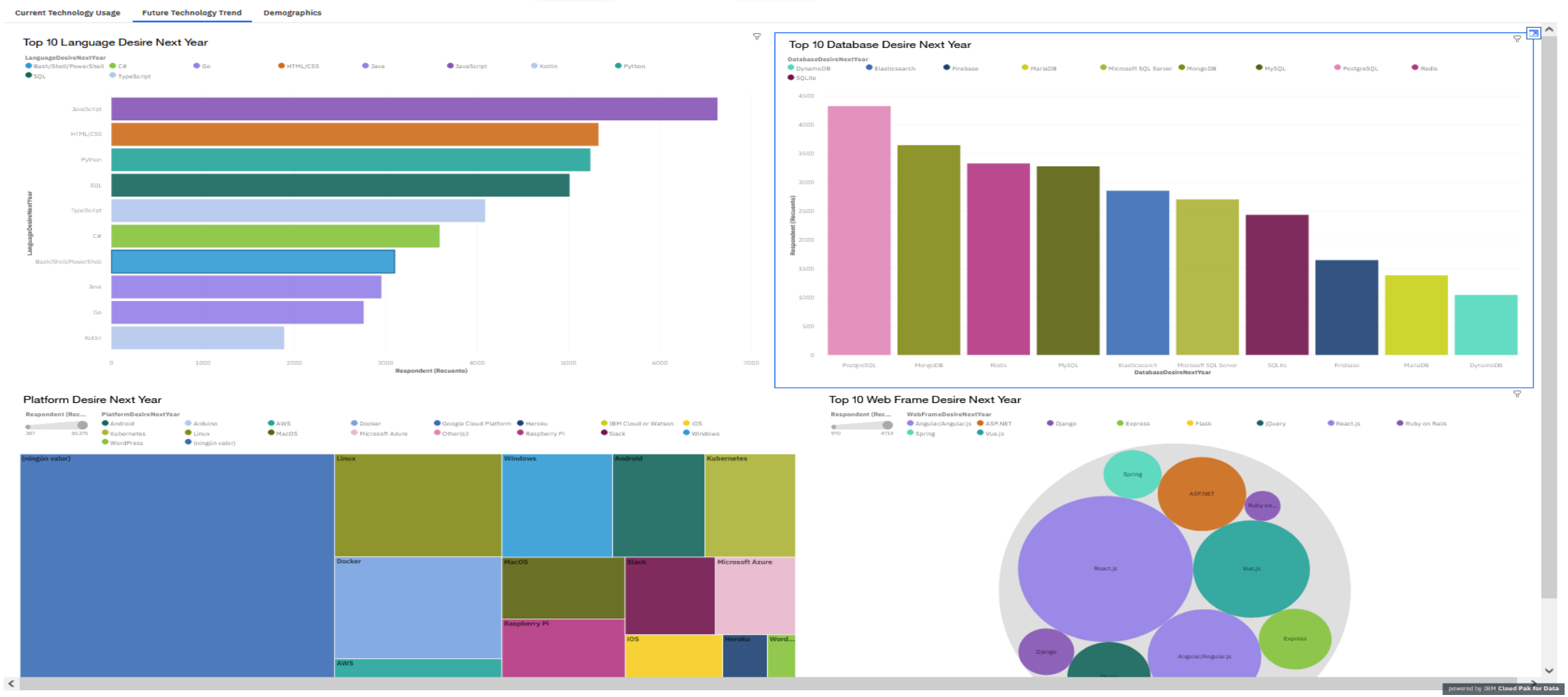
DASHBOARD

https://dataplatform.cloud.ibm.com/dashboards/c23f9c90-b0c9-4479-8b6d-34bbef7aede8/view/7708f42d24bb1ee969eff6e4079e2b527f33270ee6bb850184827b490e697697a8691791c82a195fda195336a6e81659cb

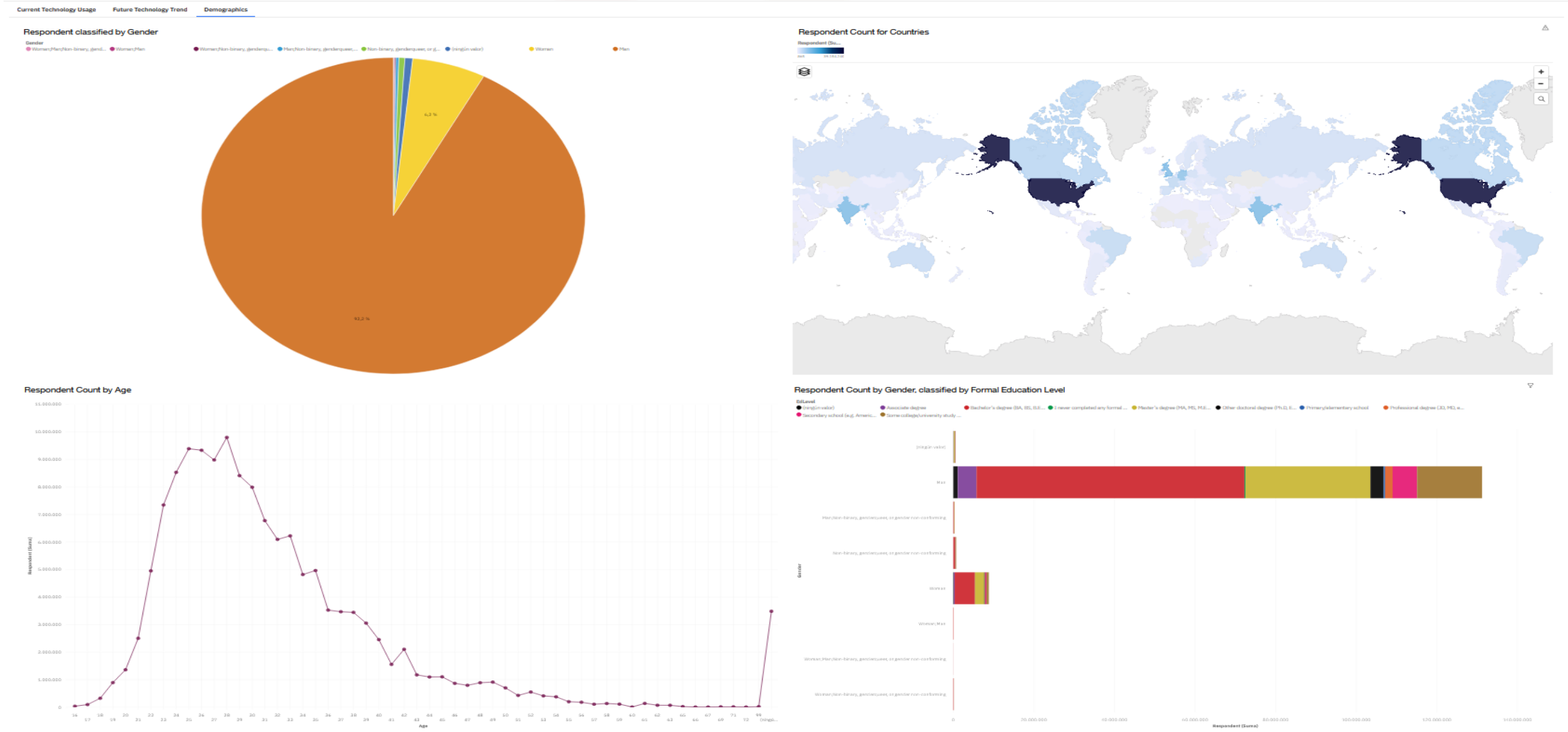
DASHBOARD TAB 1 - CURRENT TECHNOLOGY USAGE



DASHBOARD TAB 2 - FUTURE TECHNOLOGY TREND



DASHBOARD TAB 3 - DEMOGRAPHICS



DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

- Over 90% Young Male Developers
- Developers Are Largely Located In First World Countries
- HTML/CSS Widely Used & C# Getting Popular

Implications

- It Could Be Determined That There Is A Polarization Both In Terms Of Gender And Location Of Developers
- A Vast Majority Of Young Developers Without Graduate Studies Can Be Seen

CONCLUSION

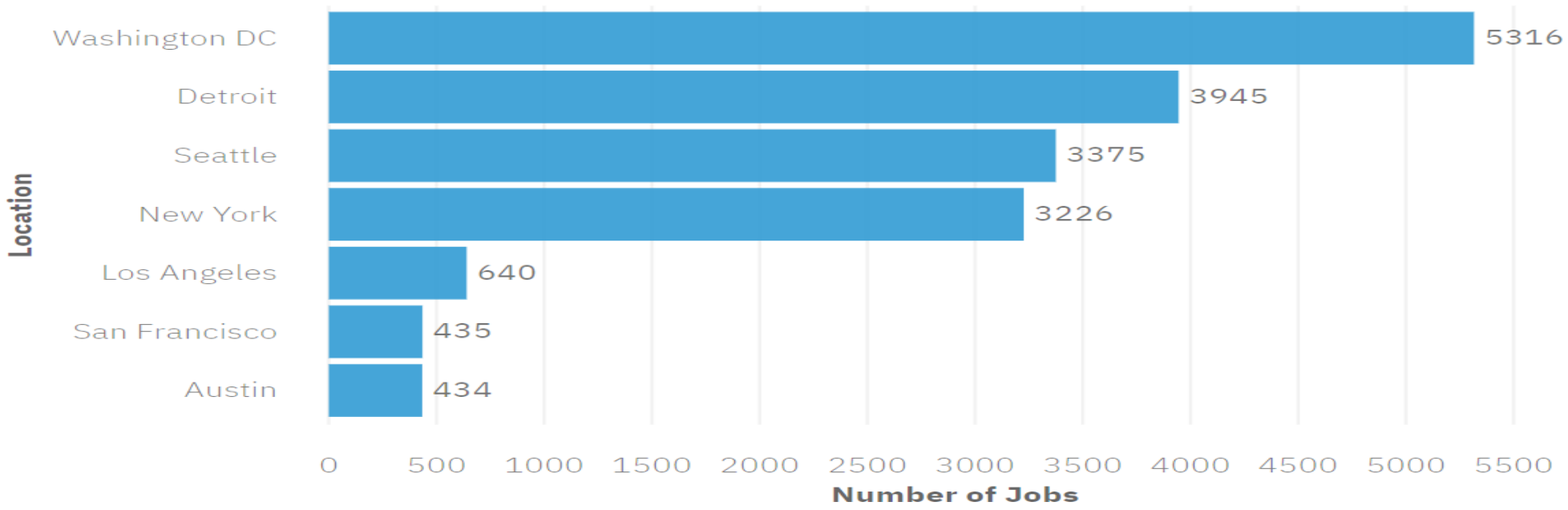
- It is possible to obtain a good approximation regarding the trends and popularity of the different platforms, tools and languages
- It is essential that developing countries can access more and better technologies to enable better access to the labor market
- As people, it could be determined that developers have a very marked profile according to their characteristics

APPENDIX

- Include any relevant additional charts, or tables that you may have created during the analysis phase.

JOB POSTINGS

In Module 1 you have collected the job posting data using Job API in a file named “job-postings.xlsx”. Present that data using a bar chart here. Order the bar chart in the descending order of the number of job postings.



POPULAR LANGUAGES

In Module 1 you have collected the job postings data using web scraping in a file named “popular-languages.csv”. Present that data using a bar chart here. Order the bar chart in the descending order of salary.